

Final Agenda

TBPOC CONFERENCE CALL August 14, 2013, 4:00pm – 5:00pm

	Topic	Presenter	Time	Desired Outcome
1.	CHAIR'S REPORT	S. Heminger, BATA		Information
2.	SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES			
	a. TBPOC August 15 Meeting Preparation	PMT	45 min	Approval
	1) Agenda*			
	2) Interim Bearing Retrofit Proposal*			
	3) Bridge Opening Date Determination*			
	4) Public Access During Opening*			
	b. Contractor Incentive	PMT	15 min	Information
3.	OTHER BUSINESS			
Next TBPOC Conference Call: August 22, 2013, 10:00am – 11:00am				

* Attachments

** Attachments at front of binder

*** Attachments to be sent under separate cover



TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE (TBPOC) MEETING

10:00 a.m. Thursday, August 15, 2013

Joseph P. Bort MetroCenter

Lawrence D. Dahms Auditorium

101 8th Street, 1st Floor

Oakland, CA 94607

The Toll Bridge Program Oversight Committee, created pursuant to California State Streets and Highway Code Section 30952.1, is tasked with project oversight and control over the state toll bridge seismic retrofit program projects.

This meeting is scheduled to be audiocast live on the Metropolitan Transportation Commission's (MTC)

Web site: www.mtc.ca.gov

AGENDA

ACTION **RECOMMENDED****

1. Roll Call

Confirm Quorum

2. Update on San Francisco-Oakland Bay Bridge East Span Seismic Safety Project

a) Interim Bearing Retrofit Proposal*

Committee Approval

The Committee will be requested to authorize the installation of bearing shims to make the new East Span of the San Francisco-Oakland Bay Bridge seismically safe for traffic while a permanent replacement of broken bolts at Pier E2 is under construction. The committee will be presented with staff's interim retrofit proposals along with independent reviews of the proposal by the Federal Highway Administration and by two engineering consultants to the Bay Area Toll Authority (BATA).

b) Bridge Opening Date Determination*

Committee Approval

The Committee will be presented with various bridge opening date scenarios, including information on construction schedules, construction risks, traffic volumes, and event schedules from around the region.

c) Public Access to Bridge During Opening*

Committee Approval

The Committee will be presented with information on public access to the bridge during opening.

Toll Bridge Program Oversight Committee Agenda

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* Attachment sent to committee members, key staff and others as appropriate. Copies will be available at the meeting.

** All items on the agenda are subject to action and/or change by the Committee. Actions recommended by staff are subject to change by the Committee.

Public Comment: The public is encouraged to comment on agenda items by completing a request-to-speak card (available from staff) and passing it to the committee secretary. Public comment may be limited by any of the procedures set forth in Section 3.09 of MTC's Procedures Manual (Resolution No. 1058, Revised) if, in the chair's judgment, it is necessary to maintain the orderly flow of business.

Meeting Conduct: If this meeting is willfully interrupted or disrupted by one or more persons rendering orderly conduct of the meeting unfeasible, the Chair may order the removal of individuals who are willfully disrupting the meeting. Such individuals may be arrested. If order cannot be restored by such removal, the members of the committee may direct that the meeting room be cleared (except for representatives of the press or other news media not participating in the disturbance), and the session may continue.

Record of Meeting: This meeting will be recorded. Audiocasts are maintained on MTC's Web site for public review for at least one year.

Memorandum

TO: Toll Bridge Program Oversight Committee **DATE:** August 13, 2013
(TBPOC)

FR: Program Management Team

RE: Agenda No. - 2a
Item – Interim Bearing Retrofit Proposal

Recommendation:

The Committee is requested to authorize the installation of bearing shims to make the new East Span of the San Francisco-Oakland Bay Bridge seismically safe for traffic while a permanent replacement of broken bolts at Pier E2 is under construction.

Discussion:

On July 10, 2013 at a meeting of the Bay Area Toll Authority (BATA), members of the Toll Bridge Program Oversight Committee (TBPOC) briefed BATA commissioners on findings contained in the recently released report on the high-strength steel bolts used on the new Bay Bridge East Span. A key focus was the ongoing effort to retrofit Pier E2 where the bolt failure occurred. The fabrication and installation of a reinforcing steel saddle retrofit is forecast for completion by December of this year.

The Toll Bridge Seismic Safety Peer Review Panel (TBSSPRP) provided a graphic showing the superior strength of the new East Span design compared to the old East Span, and supported a proposal for an interim fix at Pier E2. The TBPOC asked the Federal Highway Administration (FHWA) and two preeminent bridge engineers from the firms of Buckland & Taylor, Ltd., and Modjeski and Masters to review this recommendation.

All reviews have reached the same and unequivocal conclusion that the interim retrofit will adequately protect and allow for the opening of the new East Span while the permanent retrofit is under construction.

These reports can be found at http://www.mtc.ca.gov/news/press_releases/rel617.htm

Item 2a – Interim Bearing Retrofit Proposal



Caltrans Presentation on Shims

- Pending



FHWA Comment

- No presentation anticipated



Buckland Taylor Presentation

Buckland & Taylor

Independent Review Summary

Peter Taylor, P.E.

Brian Morgenstern, P.E.



ISSUE

Capacity (strength) of horizontal
connection of superstructure to top of
Pier E2

Horizontal – Longitudinal, Transverse

Stages

1. As designed
2. Present
3. Temporary (shimmed bearings)
4. Final

Participating Components

> Longitudinal Connection

Stage	Participating Components		
	Shear Keys		Bearings
	S1, S2	S3, S4	B1, B2, B3, B4
1			
2			
3			
4			

Participating Components

> Longitudinal Connection

Stage	Participating Components		
	Shear Keys		Bearings
	S1, S2	S3, S4	B1, B2, B3, B4
1	✓	Gap	Gap
2			
3			
4			

Participating Components

> Longitudinal Connection

Stage	Participating Components		
	Shear Keys		Bearings
	S1, S2	S3, S4	B1, B2, B3, B4
1	✓	Gap	Gap
2	Minor	Gap	Gap
3			
4			

Participating Components

> Longitudinal Connection

Stage	Participating Components		
	Shear Keys		Bearings
	S1, S2	S3, S4	B1, B2, B3, B4
1	✓	Gap	Gap
2	Minor	Gap	Gap
3	Minor	Gap	✓
4			

Participating Components

> Longitudinal Connection

Stage	Participating Components		
	Shear Keys		Bearings
	S1, S2	S3, S4	B1, B2, B3, B4
1	✓	Gap	Gap
2	Minor	Gap	Gap
3	Minor	Gap	✓
4	✓	Gap	Gap

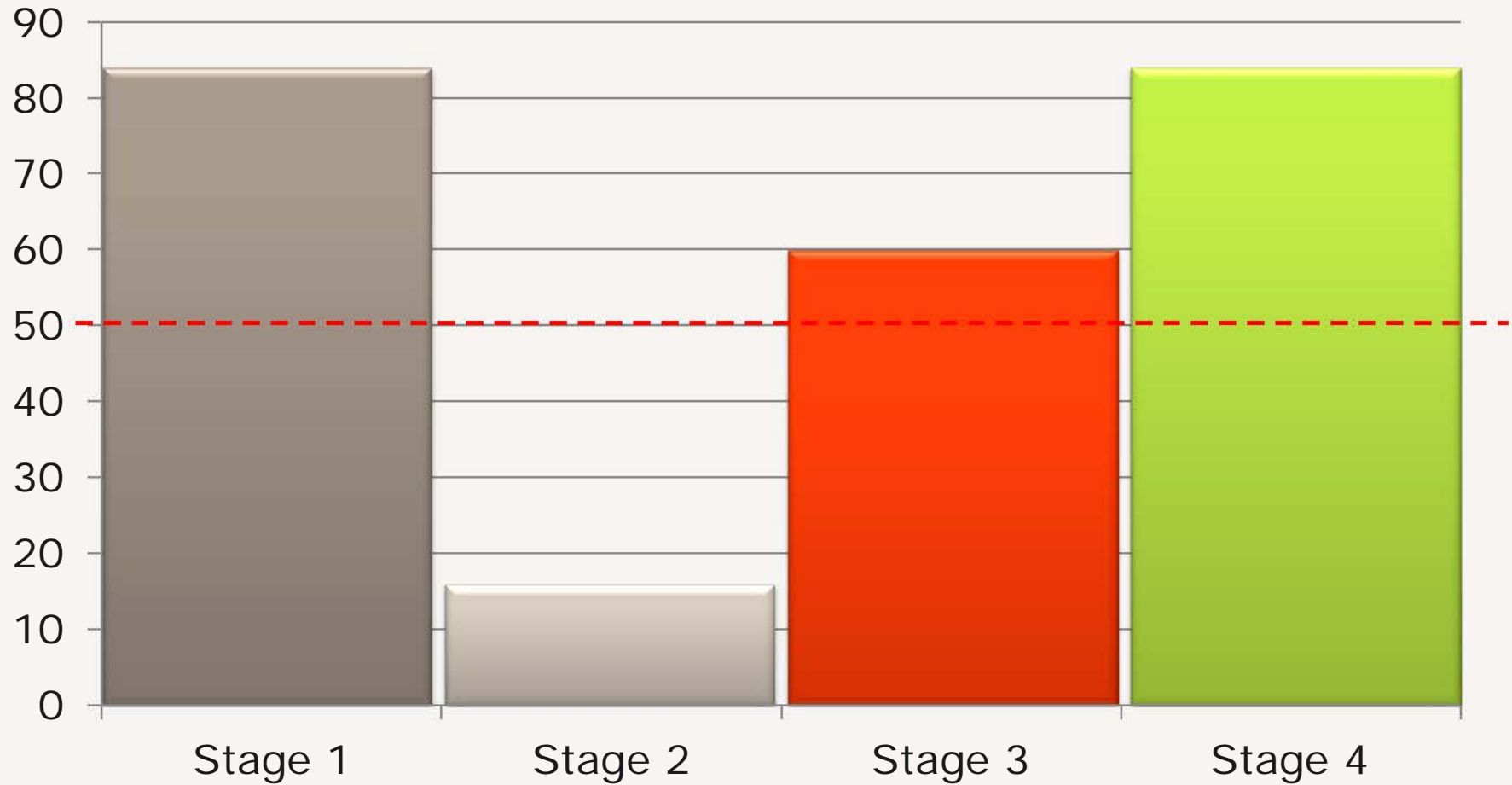
Participating Components

> Transverse Connection

Stage	Participating Components		
	Shear Keys		Bearings
	S1, S2	S3, S4	B1, B2, B3, B4
1	✓	✓	Gap
2	Minor	✓	Gap
3	Minor	✓	✓
4	✓	✓	Gap

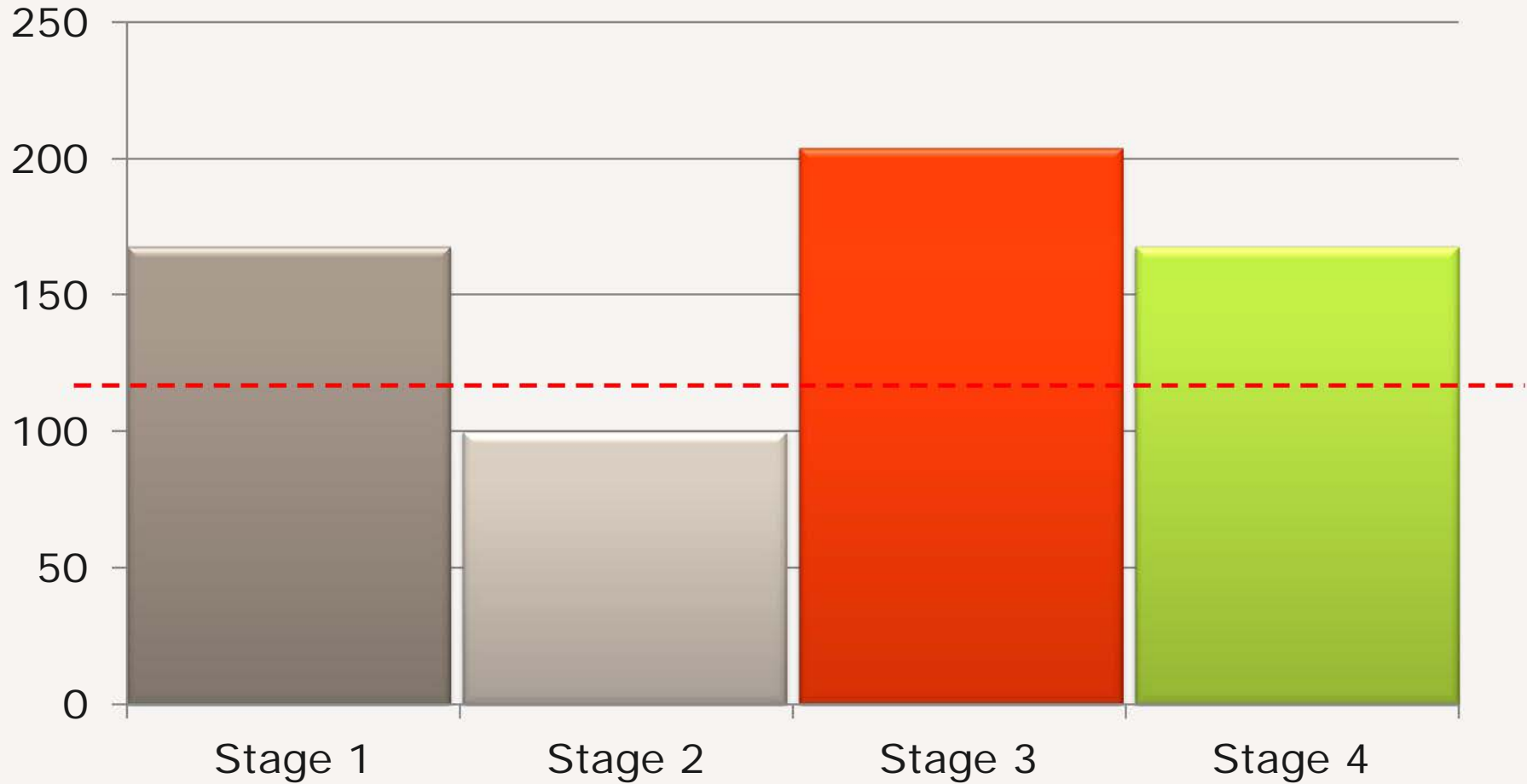
Mobilized Capacity

Longitudinal



Mobilized Capacity

Transverse



Conclusion

- › The proposal to temporarily shim the bearings is sound.

Modjeski and Masters Review

- Independently verified capacities of shear keys and bearings
- Reviewed all portions of the structure affected by the change in load path
- Evaluated design of shims and behavior of shimmed bearings
- In-depth, thorough review of both the concept and the execution

Modjeski and Masters Review

- Independently verified capacities of shear keys and bearings
- Reviewed all portions of the structure affected by the change in load path
- Evaluated design of shims and behavior of shimmed bearings
- In-depth, thorough review of both the concept and the execution

Bearing Capacities

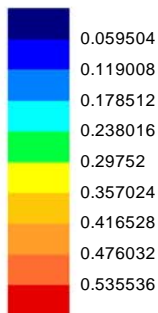
- Basic and refined analyses of the bearings and interfaces
- Independently arrived at similar capacities

Loadcase: 1:Increment 1

Results file: Bearing Lower Housing Restraint Refined 2.mys

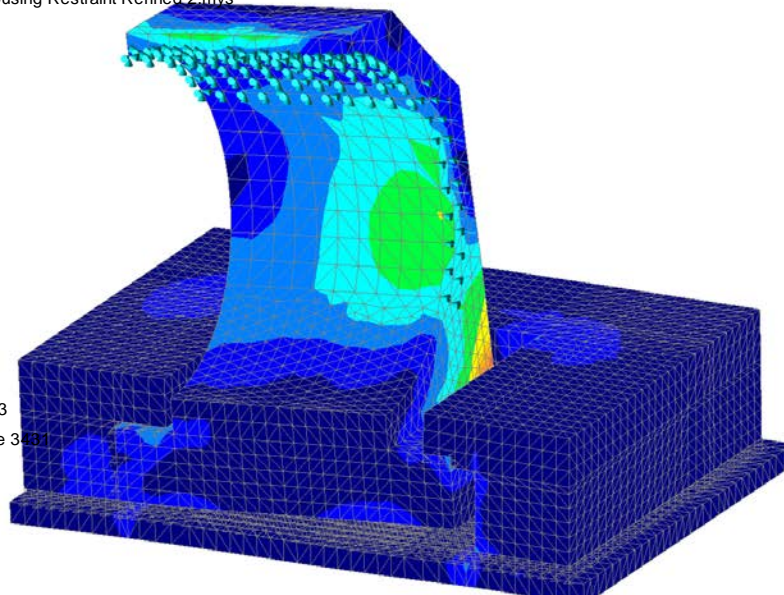
Entity: Stress - Solids

Component: SE



Maximum 0.5365 at node 2513

Minimum 0.964063E-3 at node 34831



Shear Key Capacities

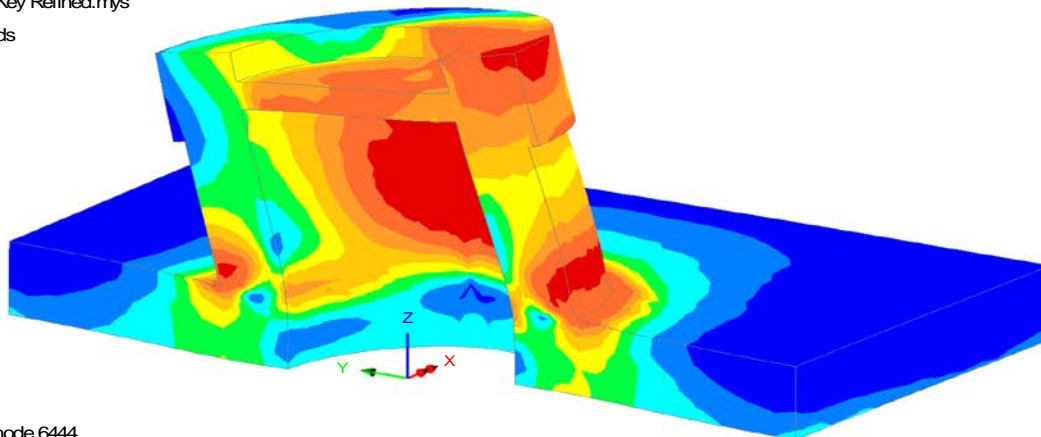
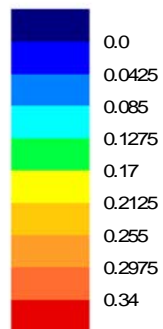
- New load path places different demands on remaining shear keys (S3 & S4)
- Basic and refined analyses performed
- Large reserved capacity available

Loadcase: 20:Increment 20 Load Factor = 1.00000

Results file: Shear Key Refined.mys

Entity: Stress - Solids

Component: SE

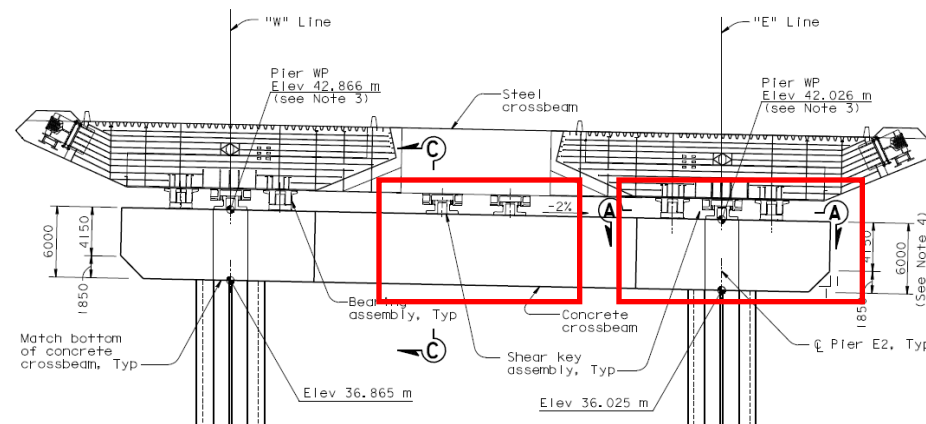


Maximum 0.345 at node 6444

Minimum 2.31343E-3 at node 5823

OBG and Pier Strut Capacities

- Evaluate steel box girder and concrete pier strut for changes in load path
- In all cases capacities available far greater than demands



Conclusions

- The concept is simple, but very effective
- Provides the required strength, plus a significant reserve
- Results in a redundant load path which further enhances safety
- Poses no risk to the bridge in the short or long term

Recommendation

- Staff recommends the installation of bearing shims to make the new East Span of the San Francisco-Oakland Bay Bridge seismically safe for traffic while a permanent replacement of broken bolts at Pier E2 is under construction. .



Memorandum

TO: Toll Bridge Program Oversight Committee **DATE:** August 13, 2013
(TBPOC)

FR: Program Management Team

RE: Agenda No. - 2b
Item – Bridge Opening Date Determination

Recommendation:

The Committee is requested to approve a 5-day closure of the bridge to complete construction from the evening of Wednesday, August 28 to the morning of Tuesday, September 3.

Discussion:

In light of the positive conclusions of the reviews of the interim bearing retrofit proposal, there is a possibility of opening the new bridge safely prior to completion of the permanent Pier E2 bolt repairs.

Staff will present information regarding construction activities and schedule necessary to open the new bridge to traffic, historic traffic volumes, and a schedule of events around the region to help determine an appropriate weekend to open the new East Span to traffic.

Item 2b – Bridge Opening Date Determination

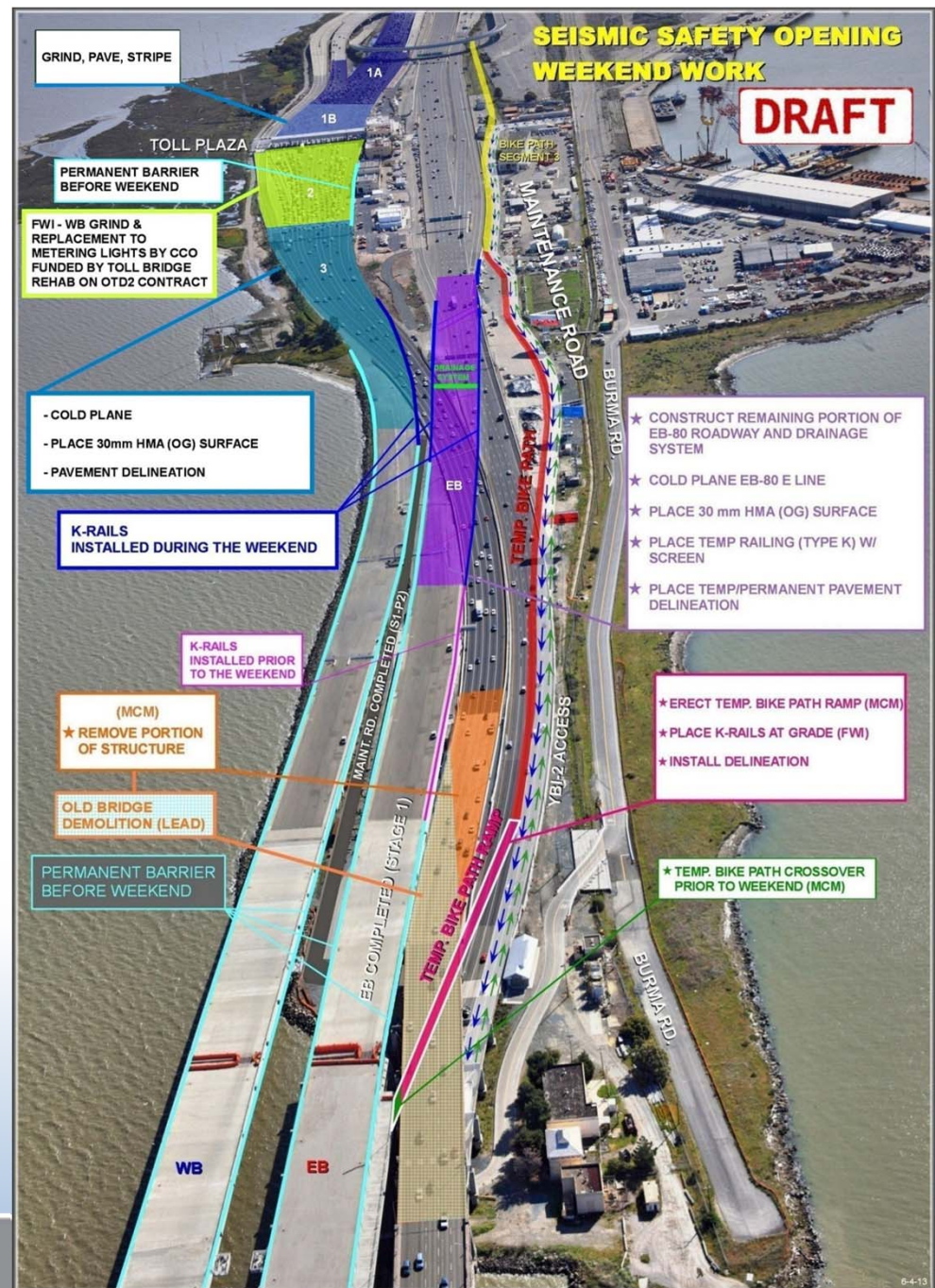


THE SAN FRANCISCO-OAKLAND
BAY BRIDGE
SEISMIC SAFETY PROJECT

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Opening Construction Activities - Oakland

- Roadway Realignment
 - Paving
 - Striping
 - Drainage
 - Barriers
- Bridge Demolition
- Bike Path Construction

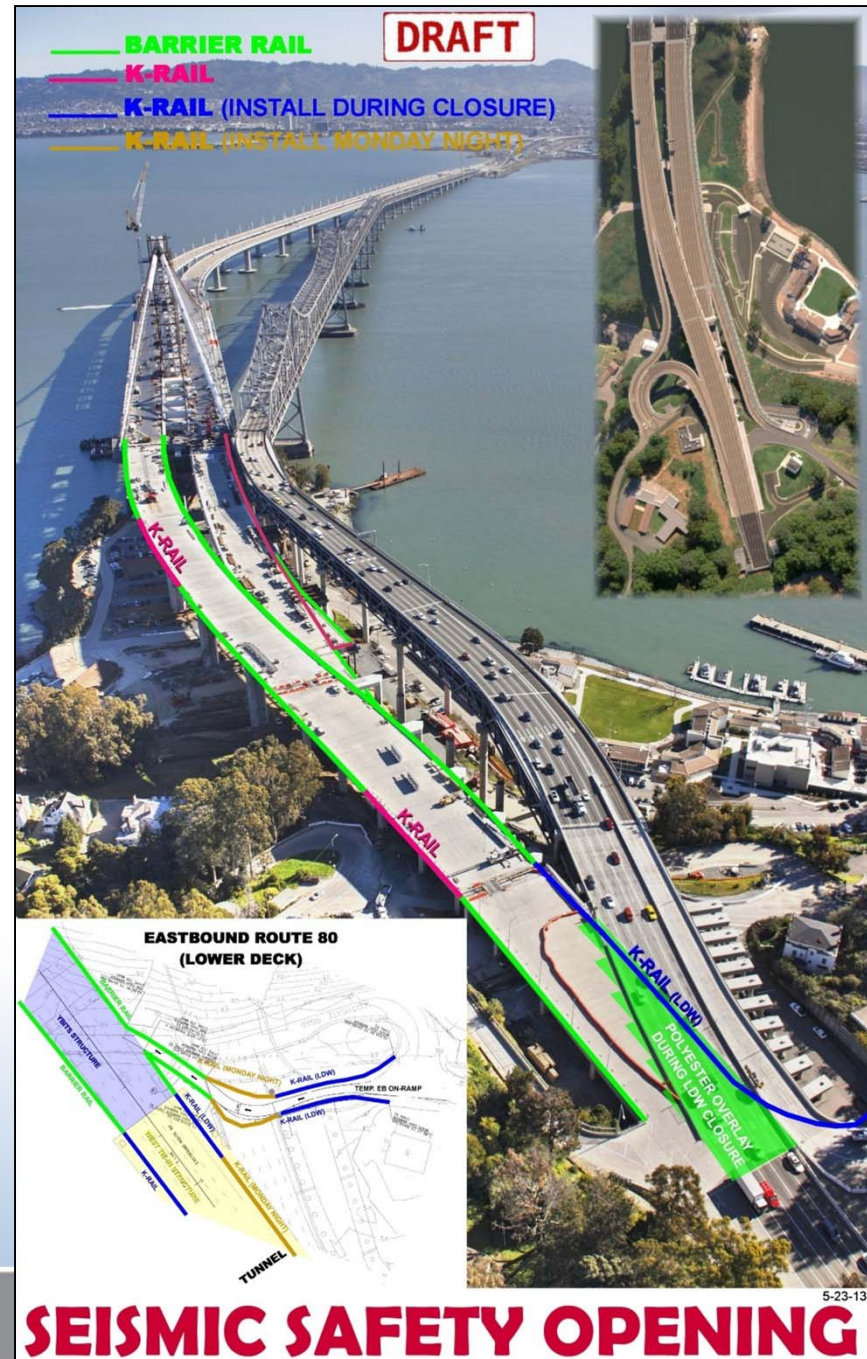


THE SAN FRANCISCO-OAKLAND
BAY BRIDGE
SEISMIC SAFETY PROJECT

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Opening Construction Activities - YBI

- Roadway Realignment
 - Paving
 - Striping
 - Barriers

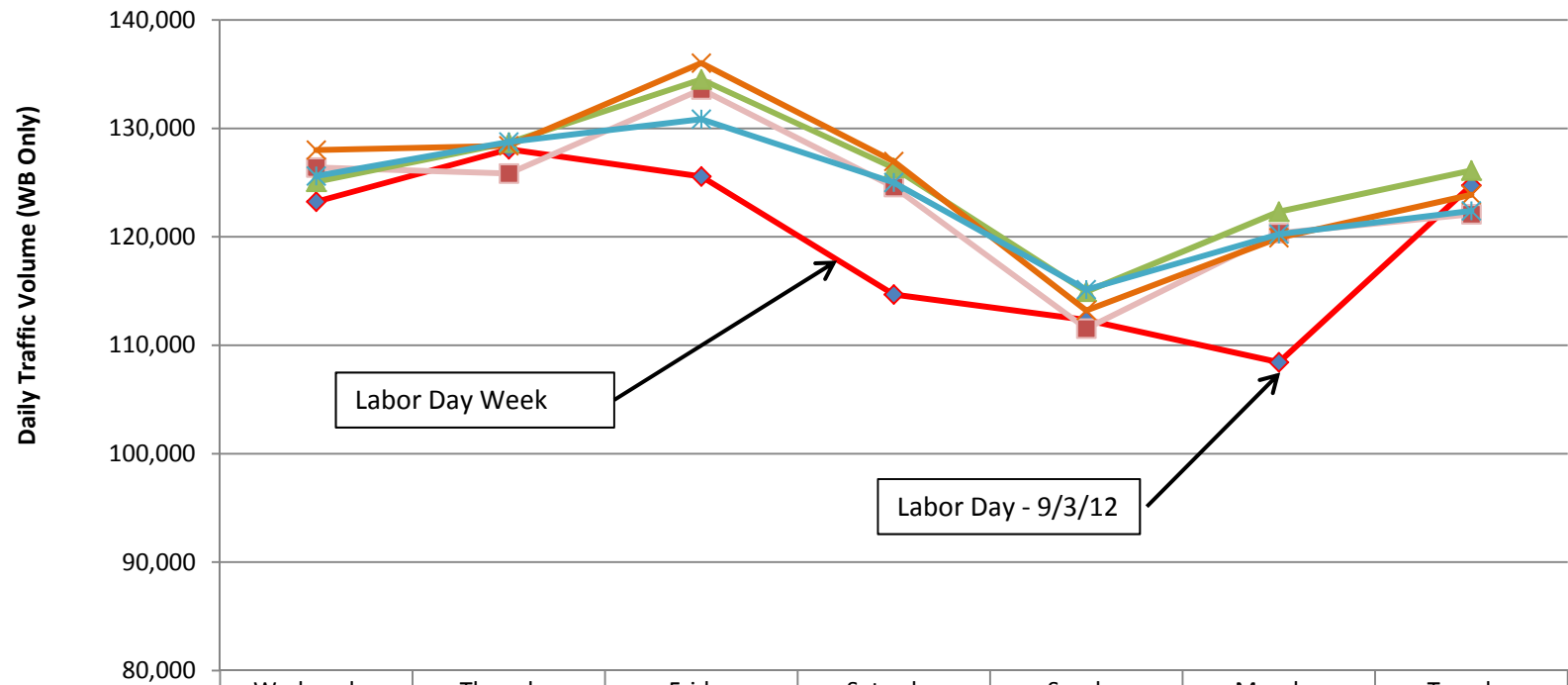


THE SAN FRANCISCO-OAKLAND
BAY BRIDGE
SEISMIC SAFETY PROJECT

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Traffic Volumes

SFOBB Westbound Daily Volume for September 2012



	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
◆ Week Including Labor Day	123,246	128,071	125,569	114,685	112,331	108,428	124,749
■ Week After Labor Day	126,400	125,839	133,592	124,594	111,547	120,343	122,089
▲ Second Week in September	125,082	128,696	134,526	126,355	114,943	122,326	126,117
✕ Third Week in September	128,011	128,394	136,018	126,957	113,212	119,917	123,880
* Fourth Week in September	125,611	128,750	130,855	125,014	115,131	120,254	122,395

Day of the Week



THE SAN FRANCISCO-OAKLAND
BAY BRIDGE
SEISMIC SAFETY PROJECT

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Bridge Closure Options/Events Calendar

Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
28 Aug	29	30 	31  	1 Sep 	2  Labor Day	3 
Bridge Closure Option #1 – PM Wed 28 Aug to AM Tues 3 Sep						
4 	5  	6  	7    	8    	9 	10  
Bridge Closure Option #2 – PM Tue 3 Sep to AM Mon 9 Sep						
11 	12 	13	14   	15    	16 	17  
Bridge Closure Option #3 – PM Tue 10 Sep to AM Mon 16 Sep						
18 	19  	20 	21  	22   	23 	24  
Bridge Closure Option #1 – PM Tue 17 Sep to AM Mon 23 Sep						
25  	26  	27 	28 	29  	30	1 Oct
Bridge Closure Option #1 – PM Tue 24 Sep to AM Mon 30 Sep						

Coordination

- Cities Oakland and San Francisco
- BART
- CHP
- Treasure Island
- Others



Recommendation

- Staff recommends a 5-day closure of the bridge to complete construction.
- Staff recommends Labor Day Weekend to open the bridge from the evening of Wednesday, August 28 to the morning of Tuesday, September 3.



Memorandum

TO: Toll Bridge Program Oversight Committee **DATE:** August 13, 2013
(TBPOC)

FR: Program Management Team

RE: Agenda No. - 2c
Item – Public Access to Bridge during Opening

Recommendation:

The Committee is requested to open the bridge with a minimal chain-cutting event.

Discussion:

The Toll Bridge Program Oversight Committee has been working with the Bay Area Alliance to coordinate public access to the bridge during bridge opening. Unfortunately, , prior discuss plans for public access to the bridge cannot be adequately coordinated in a safe manner given the shortened notice provided for bridge opening.



BAY BRIDGE

C E L E B R A T I O N

PROJECT UPDATE

August 14th, 2013





POTENTIAL OPENING EVENT OPTIONS

- **Gold Level** – Chain Cutting @ Toll Plaza for 8,000 ppl
- **Silver Level** – Dedication Ceremony @ SAS for 1,200 ppl
- **Bronze Level** – Sawtooth Reception Only for 650 ppl
- **Media Event** – Simple Chain Cutting w/ Press Riser for 200 ppl



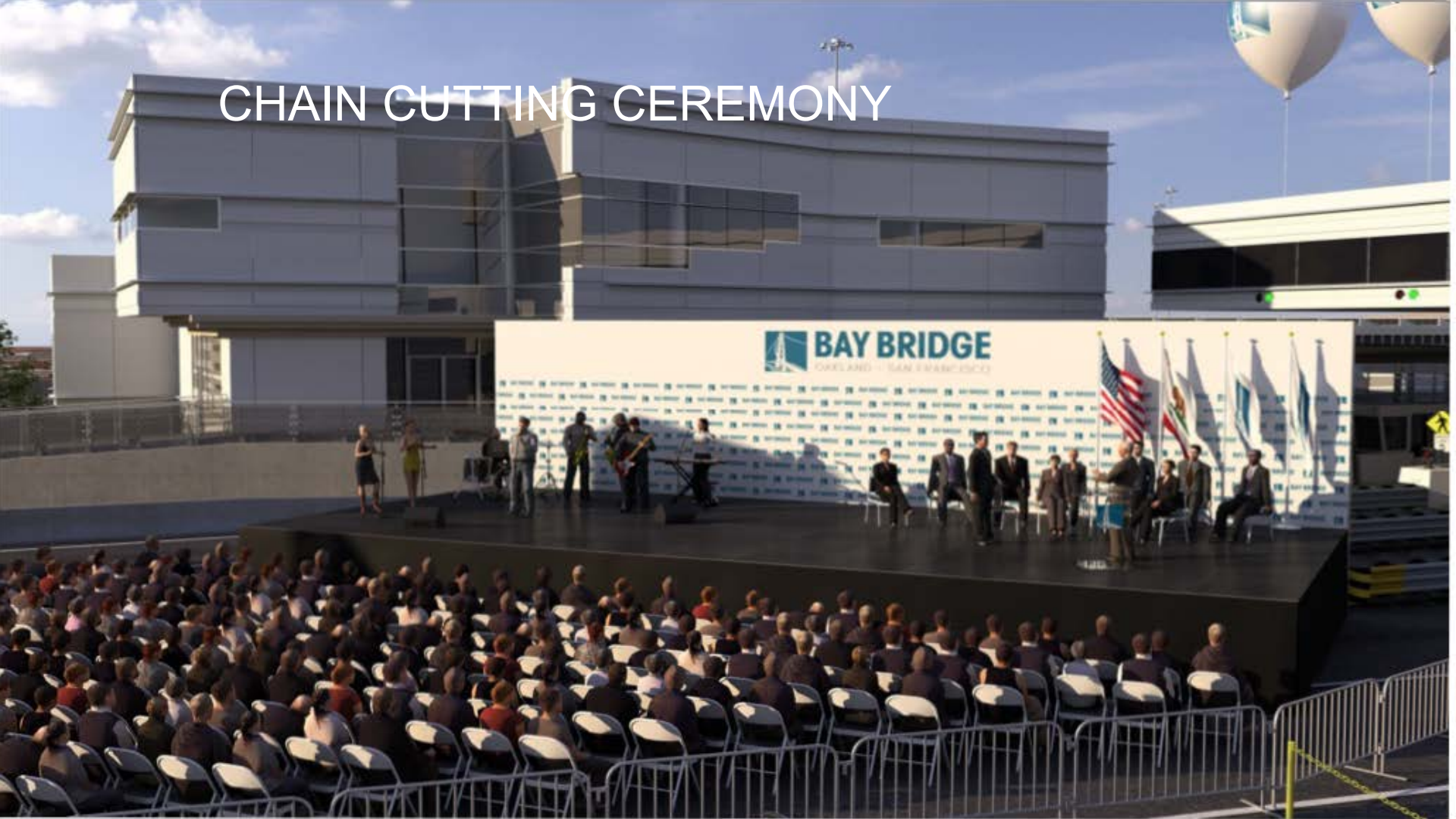
PROGRAM OF EVENTS – GOLD LEVEL

MONDAY, SEPTEMBER 2

- Chain Cutting Ceremony @ Toll Plaza
- 8,000 People
- Invitation Only – Electronic or Will Call
- VIP Reception – 650 @ Sawtooth Building



CHAIN CUTTING CEREMONY



CHAIN CUTTING CEREMONY





PROGRAM OF EVENTS – GOLD LEVEL

TRANSPORTATION & ACCESS

- Shuttles From:
 - Downtown San Francisco
 - Oakland BART
 - Port of Oakland – Park & Ride
- VVIP Valet on Burma Rd.

BAY BRIDGE PLAZA
Westbound Lanes

CHAIN CUTTING
SHUTTLE ROUTES-TOLL PLAZA

August 14, 2013

PORT OF OAKLAND PARK AND RIDE
Terminals 33/34 Port of Oakland



SAWTOOTH BUILDING / BURMA GATE
Burma Road

CHAIN CUTTING SHUTTLE ROUTES-BURMA ROAD

August 14, 2013

PORT OF OAKLAND PARK AND RIDE
Terminals 33/34 Port of Oakland





PROGRAM OF EVENTS – GOLD LEVEL

REGISTRATION & CREDENTIALING

- 2 Options:
 - Online Website Registration – Scannable Ticket
 - Onsite Will Call – Wristband/Credential Provided
- All Attendees Checked-In Prior to Boarding Buses



PROGRAM OF EVENTS – SILVER LEVEL

MONDAY, SEPTEMBER 2

- Dedication Ceremony
- 1200 People @ SAS Tower
- Invitation Only – Electronic or Will Call



DEDICATION CEREMONY





PROGRAM OF EVENTS – SILVER LEVEL

TRANSPORTATION & ACCESS

- Shuttles From:
 - Downtown San Francisco
 - Oakland BART
 - Port of Oakland – Park & Ride
- VVIP Valet on Burma Rd.



DEDICATION CEREMONY
SAS Tower

DEDICATION
SHUTTLE ROUTES-SAS

August 14, 2013

PORT OF OAKLAND PARK AND RIDE
Terminals 33/34 Port of Oakland



PROGRAM OF EVENTS – SILVER LEVEL

REGISTRATION & CREDENTIALING

- 2 Options:
 - Online Website Registration – Scannable Ticket
 - Onsite Will Call – Wristband/Credential Provided
- All Attendees Checked-In Prior to Boarding Buses



PROGRAM OF EVENTS – BRONZE LEVEL

MONDAY, SEPTEMBER 2

- Dedication Ceremony
- 650 People @ Sawtooth building
- Invitation Only – Electronic or Will Call
- No Chain Cutting or Bridge Access
- Shuttles From Wake Rd. Parking Lot, Oakland BART & SF
- VVIP Valet @ Burma Rd.







PROGRAM OF EVENTS – BRONZE LEVEL

TRANSPORTATION & ACCESS

- Shuttles From:
 - Downtown San Francisco
 - Oakland BART
 - Wake Rd. Lot – Park & Ride
- VVIP Valet on Burma Rd.



PROGRAM OF EVENTS – BRONZE LEVEL

REGISTRATION & CREDENTIALING

- 2 Options:
 - Online Website Registration – Scannable Ticket
 - Onsite Will Call – Wristband/Credential Provided
- All Attendees Checked-In Prior to Boarding Buses



PROGRAM OF EVENTS – MEDIA EVENT

MONDAY, SEPTEMBER 2

- Chain Cutting
- 200 People @ Toll Plaza
- Invitation Only – Register at PIO
- Press Riser
- No Transportation Provided – Valet on Burma Rd.



Event Cost Breakdown

	Gold	Silver	Bronze	Media Event
Chain Cutting w/ 8,000 Person Audience & Sawtooth Reception	\$ 1.38 M	-	-	-
Dedication Ceremony @ SAS Tower	-	\$ 670 K	-	-
Dedication Ceremony @ Sawtooth Building	-	-	\$ 360 K	-
Chain Cutting - Media Event	-	-	-	\$ 75 K
Total	\$ 1.38 M	\$ 670 K	\$ 360 K	\$ 75 K



Budget Breakdown

GOLD EVENT – CHAIN CUTTING @ TOLL PLAZA

- Stage Production – \$669 K
- Transportation – \$176 K
- Event Infrastructure – \$125 K
- Sawtooth Reception – \$365 K



Budget Breakdown

SILVER EVENT – DEDICATION CEREMONY @ SAS

- Stage Production – \$478 K
- Transportation – \$65 K
- Event Infrastructure – \$83 K



Budget Breakdown

BRONZE EVENT – SAWTOOTH RECEPTION

- Transportation – \$140 K
- Infrastructure – \$35 K
- Catering – \$63 K